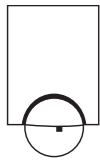


ARGUS 220 for 12 V

Operating instructions



Art. no. 565426

Accessories

- Mounting bracket (Art. no. 565291/92/93)
- Radio module for ARGUS 220 movement detector (Art. no. 565495)

For your safety**⚠ ⚠ DANGER****HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH**

Safe electrical installation must be carried out only by skilled professionals. Skilled professionals must prove profound knowledge in the following areas:

- Connecting to installation networks
- Connecting several electrical devices
- Laying electric cables
- Safety standards, local wiring rules and regulations

Failure to follow these instructions will result in death or serious injury.

ARGUS introduction

The ARGUS 220 for 12 V Connect (hereafter called ARGUS) is an electronic movement detector for inside and outside use. It registers moving sources of heat within its range, e.g. people, and switches the loads connected whenever it detects a movement.

It requires a supply voltage of DC 12 V and is therefore particularly suited for use in mobile homes or caravans, for example. You can connect loads with a supply voltage of up to 230 V to its floating, switched output. This could include:

- ohmic loads (e.g. 230 V incandescent and halogen lamps)
- inductive loads (e.g. low-voltage halogen lamps with inductive transformer)
- capacitive loads (e.g. electronic transformers)
- inductive loads (e.g. low-voltage halogen lamps with inductive transformer)

Surface monitoring of 220° for larger house fronts and areas of the house (max. range of 16 m) is combined with a 360° short-range zone with a radius of approx. 4 m. The operating elements for setting the brightness threshold, switching duration and sensitivity are located under the cover plate for protection.

The ARGUS can be mounted on the wall or ceiling and also on to corners or fixed pipes with the mounting bracket (art. no. 5652 ..) which is available as an accessory.

The integrated functional display lights up when movement is detected and thus simplifies the alignment of the device at the installation site.

The area of detection can be adapted to the local conditions due to the horizontally, vertically and axially adjustable sensor head. You can also block unwanted zones or sources of interference (e.g. trees) from the area of detection using the masking segments provided.

The device is fitted with a light sensor whose brightness threshold can be set between approx. 3 and 1000 lux.

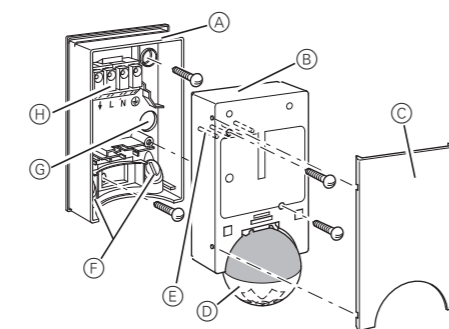
If you additionally equip the ARGUS with an ARGUS 220 movement detector radio module (565495), you can connect several ARGUS 220 Connect or ARGUS 220 Timer devices wirelessly. When one of the movement detectors registers a movement, it transmits to all taught-in movement detectors or receivers via the radio module; they then also switch on their connected loads.

Using ARGUS with alarm systems

i Movement/presence detectors are not suitable for use as components of an alarm system.

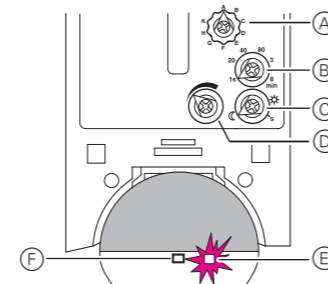
i Movement/presence detectors can trigger false alarms if the installation site has been chosen unfavourably.

Movement/presence detectors switch on as soon as they detect a moving heat source. This can be a person, but also animals, trees, cars or differences in temperature in windows. In order to avoid false alarms, the chosen installation site should be such that undesired heat sources cannot be detected (see section „Selecting the installation site“).

Connections, displays and operating elements

- (A) Wall connection box
- (B) Top section
- (C) Cover plate
- (D) Sensor head
- (E) Contact pins
- (F) Cable routing for connecting cable from underneath
- (G) Cable routing for connecting cable from behind
- (H) Terminal block for the connecting cable and for locating the contact pins

The ARGUS operating elements are protected under the cover plate. The arrow's position on the controllers shows you the set values.



- (A) ARGUS settings controller; Radio operation
- (B) Switching duration controller
- (C) Brightness threshold controller
- (D) Functional display (lights up each time movement is detected)
- (E) Brightness sensor (must not be covered)
- (F) Sensitivity controller

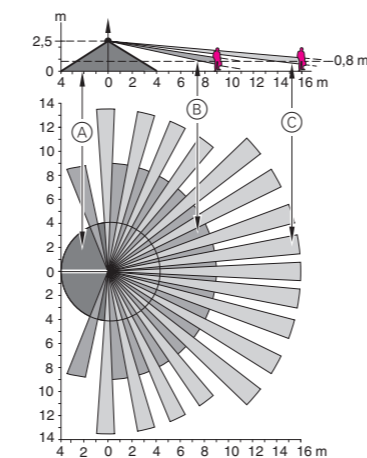
Selecting the installation site

Explanation of the symbols used

- Correct
- Not optimal
- Incorrect

When selecting a suitable installation site, you should take a number of factors into account so that the movement detector operates optimally.

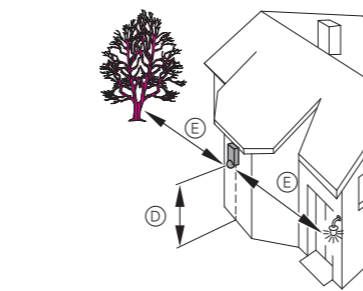
i The following figure shows the ranges of the ARGUS at average temperature conditions and a mounting height of 2.5 m. The range of a movement detector can vary greatly depending on the temperature.



Inner security zone (A): Angle of detection 360° over a radius of approx. 4 m.

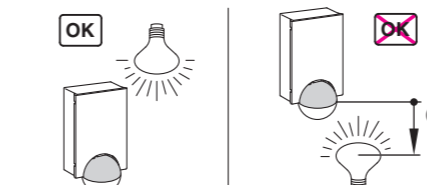
Middle security zone (B): Angle of detection 220° with an area of detection of approx. 9 m x 18 m.

Outer security zone (C): Angle of detection 220° with an area of detection of approx. 16 m x 28 m.



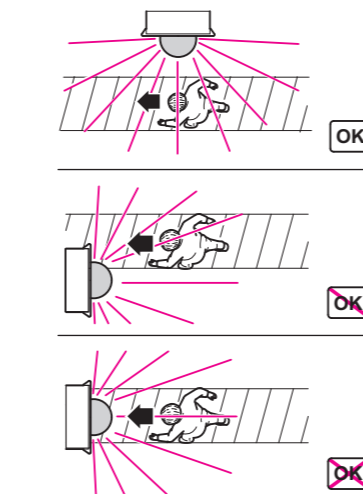
Mounting height (D): 2-3 m. For optimum monitoring, we recommend a height of 2.5 m on a solid and even base.

Minimum distance (E) to sources of optical interference: 5 m. If necessary, use the segments supplied to shade the device.

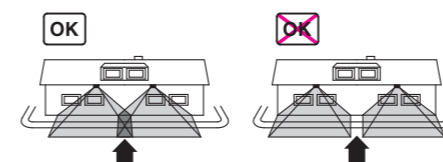


Minimum distance (F) between luminaire and movement detector: 5 m. If this distance cannot be achieved, you can use the segments provided to "mask" the light source from the area of detection.

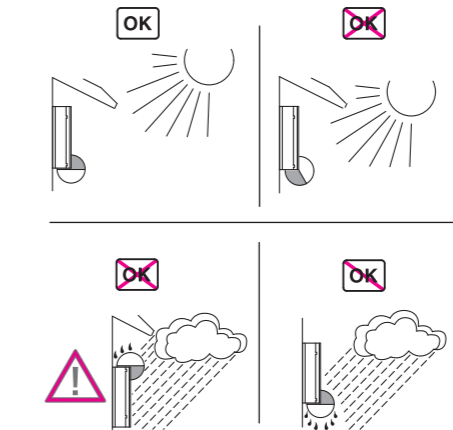
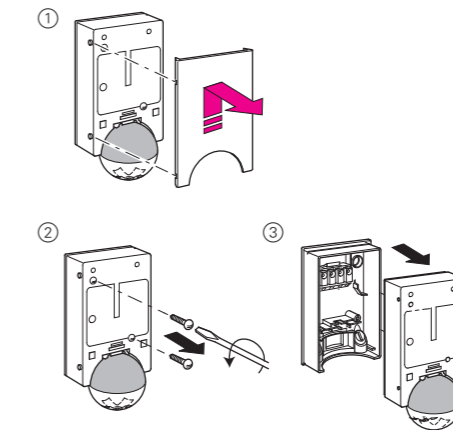
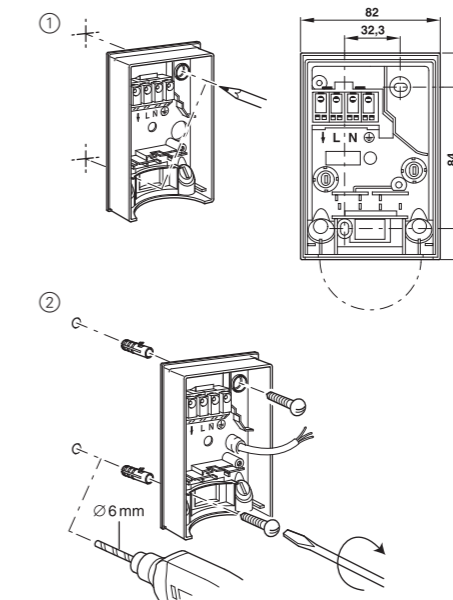
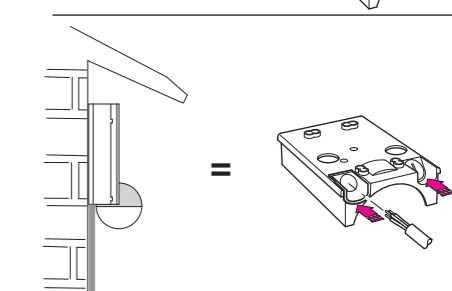
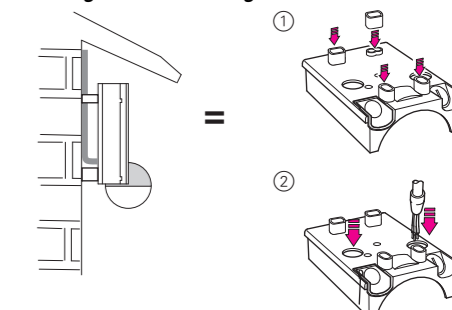
If possible, install the movement detector sideways to the direction of movement.



If you wish to attach several movement detectors, install them so that the detection areas of the individual movement detectors intersect each other.

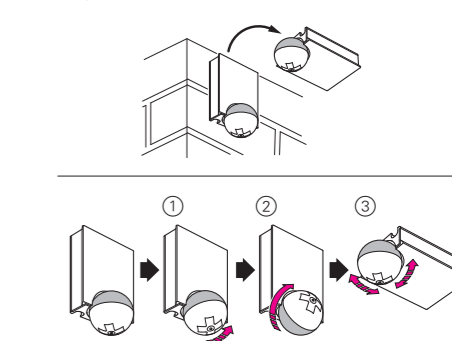


To avoid the connected load being switched on due to environmental influences, the ARGUS should be installed so that it is protected against rain and direct sunlight. A raindrop running over the lens, for example, can activate the movement detector.

**ARGUS installation****Dismantlement of the top section of the ARGUS****Installing the ARGUS to the wall****Feeding in the connecting cable****Installing the ARGUS on the ceiling**

In order to install the ARGUS on the ceiling, you must rotate the sensor head. Change the direction of rotation once you have reached the end stops.

- 1 Turn the sensor head upwards as far as it will go.
- 2 Turn the sensor head clockwise as far as it will go.
- 3 Align the sensor head.

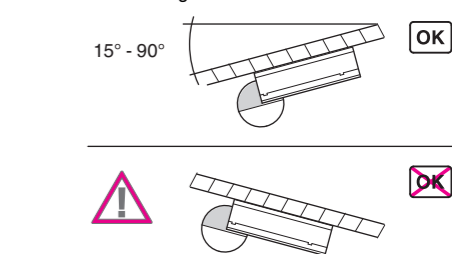
**Notice****HAZARD OF EQUIPMENT DAMAGE**

Condensation must be able to drain off.

- For sloping ceilings, always mount the device with the spherical head pointing downwards at an angle of 15° - 90°.

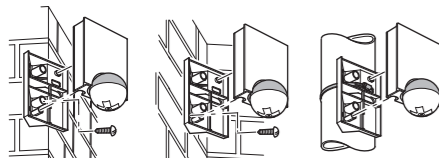
Failure to follow these instructions can damage the device.

i Type of protection IP 55 cannot be guaranteed if the mounting bracket is not 15° - 90°.



Installing the ARGUS on corners and fixed pipes

You can attach the ARGUS to inner/outer corners or fixed pipes using the mounting bracket (art. no. 5652...). You can feed the connecting cable to the device from behind through the mounting bracket.



Connecting the ARGUS

Notice

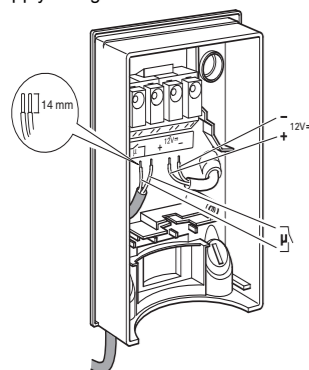
HAZARD OF EQUIPMENT DAMAGE

Operation only possible with sinusoidal mains voltages.

- Phase control dimmers or inverters with square-wave or trapezoidal voltage curves will damage the device.

Failure to follow these instructions can damage the device.

Using the floating switching contact "μ", you can switch loads corresponding to the technical specifications with any supply voltages.



"Through-wiring" to other loads is permitted.

i When connecting 230 V loads, treat the 12 V supply cable like a 230 V cable.

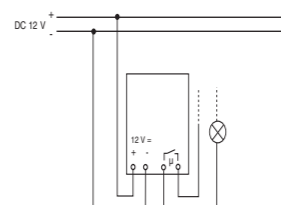
i Fuse the switched conductor using a 5 A automatic circuitbreaker or a 5 A miniature fuse.

- Feed both connecting cables (12 V supply voltage and load to be switched) into the connection box separately from one another.
- Strip the connecting cable insulation by a length of 14 mm.
- Plug the positive pole of the 12 V supply voltage into the "+" terminal.
- Plug the negative pole of the 12 V supply voltage into the "-" terminal.
- Plug the load to be switched into the terminals of the floating switching contact "μ".

Installation options

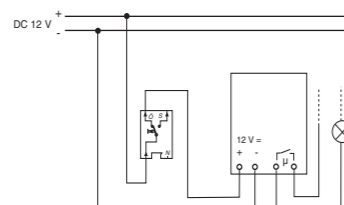
- ARGUS is permanently connected to the operating voltage

ARGUS constantly monitors its area



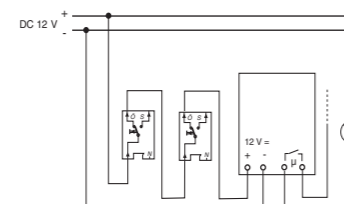
- ARGUS combined with break contact

The ARGUS is always ready for operation. By pressing the push-button (the power is briefly disconnected for 2–3 seconds), the ARGUS is switched on for the set period. Every further movement increases the switching duration.

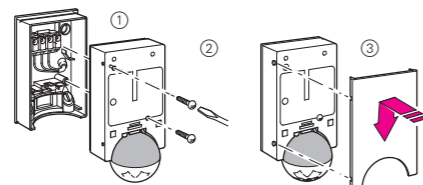


- ARGUS combined with two break contacts

Function as for installation with a break contact.



Installation of the top section of the ARGUS



The ARGUS can now be put into operation.

Putting ARGUS into operation

- Connect the supply voltage.

The load is switched on for approx. 10 s or for the set period. The functional display lights up for approx. 10 s.

Conducting a functional test

The brightness sensor must not be covered up.

- Set the switching duration to 1 second (left stop).
- Set the brightness threshold to daytime operation (right stop).
- Set the sensitivity controller to maximum (right stop).
- Test the functionality of ARGUS and the loads connected to it by walking to and fro in the detection area.

The functional display lights up each time movement is detected.

Setting ARGUS

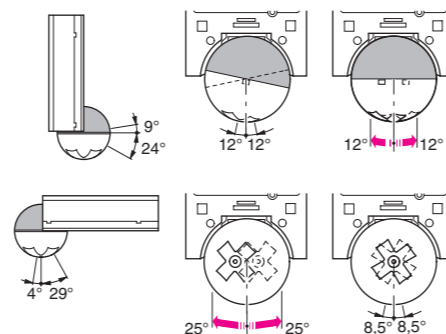
Notice

HAZARD OF EQUIPMENT DAMAGE

- The sensor head should only be rotated until it reaches the stop and no further. To achieve an angle "above" the stop, change the direction of rotation.

Failure to follow these instructions can damage the device.

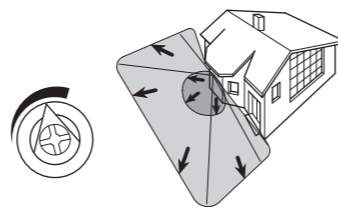
- Align the sensor head in the direction of the area that is to be monitored.



- From its edge step into the area of detection to see whether the ARGUS switches the load and the functional display as required.

Setting the sensitivity

Here you can infinitely set the distance up to which ARGUS detects movements (any distance up to max. 16 m).



Setting the brightness threshold

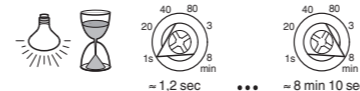
Here you can infinitely set the ambient brightness level at which the ARGUS detects movements and triggers a switching procedure.

- Moon symbol (night operation): The ARGUS will only detect movements during the hours of darkness (approx. 3 lux).
- Sun symbol (day and night operation): The ARGUS detects movements up to approx. 1000 lux.



Setting the switching duration

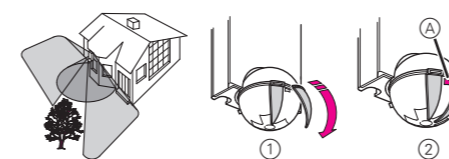
Here you can set how long the loads connected to ARGUS are switched on for. When a movement is detected, the load is switched on and stays switched on until the set period has elapsed. Every further movement restarts the switching duration.



- i** The ARGUS ignores the light-sensitive switch once the load has been switched on. If the movement detector does not switch the load off again, the reason probably is that the ARGUS constantly detects further movements and thus keeps re-starting the switching duration.

Blocking out individual areas

Using the four segments supplied, you can block out unwanted zones and sources of interference from the area of detection.



- i** Ensure that the brightness sensor (A) is not covered, as the sensitivity to light is otherwise reduced.

Technical data

Nominal voltage:	DC 12 V (min. 11 V, max. 15 V)
Switching contact:	Potential free
Max. switching current:	5 A, DC 12 V 5 A, AC 230 V, cosφ = 1
Power consumption:	< 0.5 W
Connecting terminals:	for 2x1.5 mm ² or 2x2.5 mm ² rigid conductor, stripped length 14 mm

Fuse the switched conductor using a 5 A automatic circuit-breaker or a 5 A miniature fuse.

External diameter of one cable:	max. 14.5 mm
Angle of detection:	220°
Range:	max. 16 m
Number of levels:	7
Number of zones:	112 with 448 switching segments
Minimum mounting height:	1.7 m
Recommended mounting height:	2.5 m
Sensitivity:	infinitely adjustable
Light sensor:	infinitely adjustable externally, from approx. 3 lux to approx. 1000 lux
Switching duration:	externally adjustable in 6 levels of approx. 1 sec. to approx. 8 min.


Possible settings for sensor head:

Wall mounting: 9° up, 24° down, 12° left/right, ± 12° axial

Ceiling mounting: 4° up, 29° down, 25° left/right, ± 8.5° axial

Type of protection: IP 55 at an angle of inclination from 15° to 90°

EC directives: Low-voltage guideline 2006/95/EC
EMC directive 2004/108/EC

 Dispose of the device separately from household waste at an official collection point. Professional recycling protects people and the environment against potential negative effects.

Merten GmbH

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Schneider
Electric